No. 7500071

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Bush Blue Lake 53'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* eighth *day of* August *in the year of our Lord one thousand nine hundred and* seventy-five.

Attest:

L. R. Rollins

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L. Butz

Secretary of Agriculture

FORM GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY	
~~XP-B53~~ BUSH BLUE LAKE 53 7/12/72	Garden Bean	PV NUMBER 7500071	
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 3-13-75	TIME 10 A.M.
Phaseolus vulgaris	Leguminosea	FEE RECEIVED $250 $250 $250	BALANCE DUE $— $— $—
	5. DATE OF DETERMINATION 1972		

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Asgrow Seed Company	Kalamazoo, Michigan 49001	(616) 382-4000

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Delaware	March 22, 1968

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Allen R. Trotter
Asgrow Seed Company
Kalamazoo, Michigan 49001

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Botanical Description of the Variety
- [X] 13C. Exhibit C, Objective Description of the Variety
- [X] 13D. Exhibit D, Data Indicative of Novelty
- [X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [ ] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

3/10/75 (DATE) — Allen R. Trotter (SIGNATURE OF APPLICANT)

(DATE) — (SIGNATURE OF APPLICANT)

7500071

J. D. Atkin
February 21, 1975

EXHIBIT A

'BUSH BLUE LAKE 53'

ORIGIN AND BREEDING HISTORY OF ~~XP-B53~~

1961 Original cross-BBL272 x BBL1502 made in fall 1961.

1962 F_1 grown at ARC

1963 F_2 grown at ARC and single vine selections were made.

1964 F_3 was grown and reselected in field.
F_4 was grown in the greenhouse.

1965 F_4+1 was grown in greenhouse.
F_4+2 was grown in field. Small increase plus yield trial.

1966 Tested in yield trials.
Small increase and mass selection.

1967 Tested in yield trials. Increase and mass selection.

1968 Tested in yield trials.

1969 Tested in yield trials. Mass selected.

1970 Reselected. A single vine selection made in F_{11}-all B-53 stock traces back to this one plant.

1971 Small increase.

1972 Yield trial. Small increase. Designated XP-B53.

1973 Testing throughout company. Sampling outside of company. Increase. Mass selected--500 single vine selections.

1974 Wide scale testing and sampling.

Planted the 500 SVS on a single progeny basis. All progenies were evaluated for trueness to type and all progenies saved were very similar. Any progeny thought to be different was removed completely. The seed from remaining progenies was harvested as a bulk and this has become our basic seed stock.

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EXHIBIT B

'BUSH BLUE LAKE 53'

BOTANICAL DESCRIPTION OF ~~XP-B53~~ SNAP BEAN

'BUSH BLUE LAKE 53' ~~XP-B53~~ is a Bush Blue Lake with pod quality almost identical to the better pole Blue Lakes. This bean has been developed for the Northwest and is very well adapted to that area, but it has not been well adapted to other areas.

'BUSH BLUE LAKE 53' ~~XP-B53~~ is quite similar to Bush Blue Lake 290 except it is about three or four days earlier at Twin Falls in the replicated yield trials. In Asgrow trials in Wisconsin it has also been consistently three or four days earlier than BBL290. In Oregon where beans develop slower it has been reported to be up to seven days earlier than BBL290 in commercial trials.

The plant is small to medium in size and is a determinate erect bush and the pods are borne fairly well up in the plant. The leaves are medium size, dark green in color, wrinkled, medium in thickness and have a dull color. The center leaflet is taper pointed and there is slight pubescence on both leaf surfaces.

The pods are dark green, generally small sieve and relatively short or about 120mm in length. The width thickness index is very close to 1.0 but the young pods are somewhat angular rather than perfectly round. The pods are straight to slightly curved, without constrictions, and have a dull surface. The pods are of extremely high quality due to very low fiber content, dark color, slow seed development and Blue Lake flavor and texture.

The seeds and flowers are white. The seeds are very small and seed quality is satisfactory but not as high as XP-B45.

'BUSH BLUE LAKE 53' ~~XP-B53~~ has been tested and found susceptible to Anthracnose and Halo Blight. In tests at the Prosser Experiment Station and Asgrow trials in Curly Top areas it has been found to be very tolerant to Curly Top. Dr. Silbernagel would call it resistance. ~~XP-B53~~ is resistant to Common Bean and N.Y. 15 Bean Mosaic Viruses. 'BUSH BLUE LAKE 53'

We have found no special resistance to insects or physiological conditions. In fact it may be more susceptible to heat and drouth than some varieties as it does best in Oregon under more nearly ideal conditions.

Exhibit B iswritten from several years experience and is thus rather generalized due to the fact that conditions vary from year to year. Exhibit C is compiled from results of a one year replicated trial planted especially for PVP measurements where varieties can be compared in side by side plantings. Exhibits B and C therefore, compliment each other and may vary slightly.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-12 (10-2-72)

EXHIBIT C (Bean)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

OBJECTIVE DESCRIPTION OF VARIETY

BEAN (*PHALEOLUS VULGARIS*)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)
ASGROW SEED COMPANY

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

FOR OFFICIAL USE ONLY

PVPO NUMBER 7500071

VARIETY NAME OR TEMPORARY DESIGNATION ~~XP-B53~~ 'BUSH BLUE LAKE 53'

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. TYPE:

[1] 1 = SNAPBEAN 2 = GREEN SHELL 3 = DRY EDIBLE 4 = MULTIPURPOSE

2. SEASON AND REGION OF ADAPTABILITY IN THE U.S.:

[2] Grows best during: 1 = SPRING 2 = SUMMER 3 = FALL 4 = WINTER

[1] Best adapted in: 1 = NORTHWEST 2 = NORTHCENTRAL 3 = NORTHEAST 4 = SOUTHEAST 5 = SOUTHWEST 6 = MOST REGIONS

3. MATURITY (*Days from seeding to first harvest*):

[7][2] GREEN PODS [ ][ ] GREEN SHELLS [ ][ ] DRY SEEDS

[0][4] NO. DAYS EARLIER THAN ---------- [8]

[ ][ ] NO. DAYS LATER THAN ---------- [ ]

1 = TENDERCROP 2 = KENTUCKY WONDER 3 = KINGHORN WAX
4 = WHITE KIDNEY 5 = MICHELITE 62 6 = DWARF HORTICULTURAL
7 = BUSH BLUE LAKE 8 = OTHER (*Specify*) BBL290

4. PLANT:

[1] 1 = DETERMINATE, ERECT BUSH 2 = DETERMINATE, SPRAWLING BUSH 3 = DETERMINATE, SEMIPOLE 4 = INDETERMINATE, POLE

[0][4][0] CM. HEIGHT OR LENGTH OF VINE FROM PRIMARY LEAF NODE

[0][0][5] NUMBER PRIMARY BRANCHES PER MAIN STALK

[5][5] CM. SPREAD

[0][4] NUMBER INTERNODES ON MAIN STALK BETWEEN PRIMARY LEAF AND BASE OF TERMINAL INFLORESCENCE

[1] Branching habit: 1 = COMPACT 2 = OPEN

[0][2] CM. LENGTH OF FIRST INTERNODE ABOVE PRIMARY LEAF

[0][7] MM. STALK DIAMETER ABOVE FIRST TRIFOLIATE LEAF

[2] Main stalk: 1 = BRITTLE 2 = WIREY [1] 1. STOUT 2. THIN

[2] Flower position:
[2] Pod Position:
1 = LOW, CONCENTRATED 2 = HIGH, CONCENTRATED 3 = SCATTERED

5. LEAVES:

[2] 1 = SMOOTH 2 = WRINKLED [1] 1 = DULL 2 = GLOSSY [2] Thickness: 1 = THIN 2 = MEDIUM 3 = THICK

[2] Size: 1 = SMALL (*Earliwax*) 2 = MEDIUM 3 = LARGE (*Tendercrop*) [9] CM. PETIOLE LENGTH (*To basal leaflets of first trifoliate leaf*)

[2] Tip shape of center leaflet: 1 = ROUNDED 2 = TAPER POINTED 3 = SHARP POINTED

[2] PUBESCENCE - Dorsal:
[2] PUBESCENCE - Ventral:
1 = NONE 2 = SLIGHT 3 = CONSIDERABLE

[3] Color: 1 = LIGHT GREEN (*Bountiful*) 2 = MEDIUM GREEN 3 = DARK GREEN (*Bush Blue Lake*)

'BUSH BLUE LAKE 53' 7500071 XP-B53

6. FLOWERS:

[1] Color: 1 = WHITE 2 = CREAM 3 = PINK 4 = LILAC 5 = PURPLE 6 = OTHER *(Specify)*_____

[2] Racemes: 1 = LONG 2 = MEDIUM 3 = SHORT [3] NUMBER FLOWERS PER RACEME

7. FRESH PODS: *(Edible maturity, averages for 10 pods)*

[3] Color: 1 = LIGHT GREEN *(Bountiful)* 2 = MEDIUM GREEN *(Tendergreen)* 3 = DARK GREEN *(Wade)* 4 = LIGHT YELLOW *(Brittlewax)* 5 = GOLDEN YELLOW *(Cherokee Wax)* 6 = GREEN-RED VARIAGATED *(Horticultural)* 7 = OTHER *(Specify)* _____

[1][2] CM. LENGTH [0][9] MM. WIDTH *(Between sutures)* [0][9] MM. THICKNESS [1][0] WIDTH / THICKNESS X 10

[4] Cross section pod shape: 1 = FLAT 2 = OVAL 3 = CREASEBACK 4 = ROUND

[2] Curvature: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[2] Pubescence: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE

[1] Constrictions: 1 = NONE 2 = SLIGHT 3 = DEEP

[2] Spur: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[2] Surface: 1 = SHINY 2 = DULL

[1] Surface: 1 = SMOOTH 2 = BLISTERED

[2] Pod flesh: 1 = LIGHT 2 = DARK

[1] Pod flesh: 1 = FIRM 2 = WATERY

[11] MM. SPUR LENGTH

[2] Suture string: 1 = PRESENT 2 = ABSENT

[1] Fiber: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE

[1] Seed development: 1 = SLOW 2 = MEDIUM 3 = FAST

[7] NUMBER OF SEEDS PER POD

[ ] NUMBER PODS PER PLANT *(Once over harvest)*

[ ] NUMBER MARKETABLE PODS PER PLANT *(Once over harvest)*

[1] Machine harvest: 1 = ADAPTED 2 = NOT ADAPTED

8. SEED COAT COLOR:

[1] 1 = MONOCHROME 2 = POLYCHROME

[1] 1 = SHINY 2 = DULL

[1] Primary color: [ ] Secondary color: 1 = WHITE 2 = YELLOW 3 = BUFF 4 = TAN 5 = BROWN 6 = PINK 7 = RED 8 = PURPLE 9 = BLUE 10 = BLACK 11 = OTHER *(Specify)*_____

[ ] Color pattern: 1 = SPLASHED 2 = MOTTLED 3 = STRIPED 4 = FLECKED 5 = DOTTED

[ ] Secondary color location: 1 = HILAR RING 2 = HILAR SURFACE 3 = STROPHIOLE 4 = MICROPYLE 5 = SIDES 6 = DORSAL SURFACE 7 = NOT RESTRICTED TO ANY AREA 8 = COMBINATION OF LOCATIONS *(Specify)*_____

[1] Hilar ring: 1 = NOT PRESENT 2 = NARROW 3 = BUTTERFLY SHAPED

[1] Vein-like under coat pattern: 1 = ABSENT 2 = PRESENT

9. SEED SHAPE AND SIZE:

[1] Hilum view: 1 = ELLIPTICAL 2 = OVAL 3 = ROUND

[3] Side view: 1 = OVAL 2 = ROUND 3 = KIDNEY 4 = TRUNCATE ENDS

[4] Cross section: 1 = ELLIPTICAL 2 = OVAL 3 = CORDATE 4 = ROUND

[23] GM. WEIGHT PER 100 SEEDS

[4] Classification: 1 = PEA 2 = MEDIUM 3 = MARROW 4 = KIDNEY 5 = PINTO

[0][5] MM. WIDTH *(Dorsal to ventral)*

[0][5] MM. THICKNESS *(Side to side)*

[1][2] MM. LENGTH

[0][1][0] WIDTH / THICKNESS X 10

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FORM GR-470-12 (PAGE 3 OF 3 PAGES) BUSH BLUE LAKE 53' ~~XP-B53~~

10. ANTHOCYANIN: *(1 = Absent 2 = Present):*

[1] FLOWERS	[1] STEMS	[1] PODS	[1] SEEDS	[1] LEAVES

11. DISEASE RESISTANCE *(0 = Not tested; 1 = Susceptible; 2 = Resistant):*

[0]	RUST *(Specify race)* _____	[0]	ANGULAR LEAF SPOT
[0]	BACTERIAL WILT	[2]	COMMON BEAN MOSAIC
[1]	ANTHRACNOSE	[0]	YELLOW BEAN MOSAIC
[0]	SOUTHERN BEAN MOSAIC	[0]	FUSARIUM ROOT ROT
[2]	CURLY TOP very tolerant	[2]	N.Y. 15 BEAN MOSAIC
[0]	POWDERY MILDEW	[0]	BEAN MOSAIC VIRUS 4
[1]	HALO BLIGHT	[0]	FUSCOUS BLIGHT
[0]	ALFALFA MOSAIC VIRUS	[0]	ALFALFA MOSAIC VIRUS 2
[0]	POD MOTTLE VIRUS	[0]	RED NODE VIRUS
[0]	ROOT KNOT NEMATODE	[0]	OTHER *(Specify)* _____

12. INSECT RESISTANCE: *(0 = Not tested; 1 = Susceptible; 2 = Resistant)*

[0]	APHIDS	[0]	LEAF HOPPERS
[0]	POD BORER	[0]	LYGUS
[0]	THRIPS	[0]	WEAVILS
[0]	SEED CORN MAGGOT	[0]	OTHER *(Specify)* _____

13. PHYSIOLOGICAL RESISTANCE: *(0 = Not tested; 1 = Susceptible; 2 = Resistant)*

[0] HEAT	[0] COLD	[0] DROUGHT	[0] OTHER *(Specify)* _____

REFERENCES: The following publications may be used as a reference in completing this form:

1. Beans of New York. Vol. 1 Part II of Vegetables of New York. U.P. Hedrick et al. J. B. Lyon Company, Albany, N.Y. 1931.
2. Yarnell, S. H., Cytogenetics of the Vegetable Crops IV. Legumes. Bot. Rev. 31:247 - 330. 1965.
3. USDA Yearbook of Agriculture. 1937.

COLOR: Nickerson's or any recognized color fan may be used to determine the colors.

Exhibit D

~~XP-B53~~ 'BUSH BLUE LAKE 53'

In 1972 BBL290 and ~~XP-B53~~ 'BUSH BLUE LAKE 53' were harvested on the same dates. However, it will be noted that ~~XP-B53~~ 'BUSH BLUE LAKE 53' sieve sizes were considerably larger than those of BBL290 in all four harvests. Maximum sieve sizes developed by the two varieties are very similar. The 1972 data indicates that the ~~B53~~ 'BUSH BLUE LAKE 53' sequence of harvests should have started about three days earlier to have been harvested at the same maturity as BBL290.

In 1973 the sequence of harvests started four days earlier for ~~B53~~ 'BUSH BLUE LAKE 53' than for BBL290. The sieve sizes for the different harvests were quite comparable indicating that in 1973, ~~B53~~ 'BUSH BLUE LAKE 53' was about four days earlier than BBL290.

In 1974 the sequence of harvests started two days earlier for ~~B-53~~ 'BUSH BLUE LAKE 53' than for BBL290. In the first three harvests the ~~B53~~ 'BUSH BLUE LAKE 53' sieve size was larger than that of BBL290, but in the fourth and fifth harvests the sieve size was practically identical. This again indicates that ~~XP-B53~~ 'BUSH BLUE LAKE 53' is approximately three days earlier than BBL290.

The data given above can be arranged in a different manner to compare the sieve sizes of the two varieties when they were harvested on the same date. The data taken from the above table are as follows:

Harvest Date	% SIEVE 5 AND OVER 'BUSH BLUE LAKE 53' ~~XP-B53~~	BBL290
8/2/72	32	13
8/4/72	42	25
8/7/72	64	40
8/9/72	65	53
8/11/73	32	25
8/13/73	47	32
8/15/73	57	48
8/8/74	32	18
8/10/74	43	28
8/13/74	48	36
8/15/74	55	51
Mean	47.0	33.5

During the three years the two varieties were harvested on the same date eleven times and in every comparison the sieve size of ~~B-53~~ 'BUSH BLUE LAKE 53' was larger and the total average was 13.5% higher. The average rate of change is almost exactly four percentage points per day and this would indicate that ~~B53~~ 'BUSH BLUE LAKE 53' is about three or four days earlier.

Asgrow has had comparative trials of BBL290 and ~~B53~~ 'BUSH BLUE LAKE 53' in Wisconsin and Oregon. These trials were not precise enough to yield data similar to that given above, however processors and others have been asked to judge maturity on the two varieties and in every instance, that I know of, ~~B53~~ 'BUSH BLUE LAKE 53' was judged to be earlier. In Wisconsin the general consensus is about three or four days earlier and in Oregon three or four days and even up to seven.

In summary, BBL290 and ~~XP-B53~~ 'BUSH BLUE LAKE 53' are quite similar but the data plus widespread observations indicate the ~~B53~~ 'BUSH BLUE LAKE 53' is about three or four days earlier.

EXHIBIT D

'BUSH BLUE LAKE 53'

PROOF OF NOVELTY OF ~~XP-B53~~ SNAP BEAN

'BUSH BLUE LAKE 53'

~~XP-B53~~ has several characteristics which clearly distinguish it from most snap bean varieties. Some of these differences are as follows:

1. Highly tolerant or resistant to Curly Top.

2. Pods practically identical to pole Blue Lake in color, texture, appearance and flavor.

3. Young pods are somewhat angular.

4. Very small seed as compared to most varieties.

5. Not widely adapted but especially well adapted to the North West.

'BUSH BLUE LAKE 53'

~~XP-B53~~ most nearly resembles Bush Blue Lake 290 and the above characteristics will not clearly distinguish the two varieties. 'BUSH BLUE LAKE 53' ~~B53~~ and BBL290 are quite similar in all respects except 'BUSH BLUE LAKE 53' ~~B53~~ is somewhat earlier. There are some differences in plant type, the pods of 'BUSH BLUE LAKE 53' ~~B53~~ are somewhat smoother and there are less short pods in 'BUSH BLUE LAKE 53' ~~B53~~. However, the differences in plant and pod type are rather subtle and it is very difficult to get objective data on these points.

Each year Asgrow conducts a yield trial in which each variety is replicated four times. The different replications are harvested separately and then bulked together for grading, pod quality evaluations and processing tests. It is extremely difficult to harvest a bean crop at exactly the correct moment. Therefore, the plots are subdivided and a series of harvests are made and yield, sieve size and quality are correlated in the different harvests which range from slightly immature to over mature.

Data from this replicated yield trial for the years 1972, 1973 and 1974 are as follows:

'BUSH BLUE LAKE 53' ~~XP-B53~~ Harvest Date	% 5 Sieve & Over	BBL290 Harvest Date	% 5 Sieve & Over
8/2/72	32	8/2/72	13
8/4/72	42	8/4/72	25
8/7/72	64	8/7/72	40
8/9/72	65	8/9/72	53
8/7/73	28	8/11/73	25
8/9/73	30	8/13/73	32
8/11/73	32	8/15/73	48
8/13/73	47	8/17/73	46
8/15/73	57	8/20/73	51
8/6/74	25	8/8/74	18
8/8/74	32	8/10/74	28
8/10/74	43	8/13/74	36
8/13/74	48	8/15/74	51
8/15/74	55	8/17/74	60

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EXHIBIT E

Statement of the Basis of Applicant's Ownership

Bean ~~XP B53~~ 'Bush Blue Lake 53'

'Bush Blue Lake 53'

Bean ~~XP B53~~ was originated and developed by Dr. W. F. Pierce, Dr. C. G. Briggs, and Dr. John Atkin, all Asgrow plant breeders. By agreement between employee and Asgrow Seed Company, all rights to any invention, discovery, or development made by an employee are assigned to the company. No rights to such invention, discovery, or development are retained by the employee.

6/

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.

13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.